



# The Birth of a Breastfeeding Baby and Mother

Judith A. Lothian, PhD, RN, LCCE, FACCE

## ABSTRACT

In this column, the author describes the way in which the normal, natural process of labor and birth prepares both mother and baby for breastfeeding. Birth practices including induced labor, routine interventions, epidural analgesia, and separation of mother and baby disrupt the process of early breastfeeding for mother and baby. Normal, natural birth sets the stage for uncomplicated breastfeeding.

---

*Journal of Perinatal Education*, 14(1), 42–45, doi: 10.1624/105812405X23667

**Keywords:** breastfeeding, normal birth, childbirth education, breastfeeding preparation

---

## READER'S QUESTION

I would like to do more to promote, protect, and support breastfeeding in my childbirth classes. I teach the benefits of breastfeeding, the risks of not breastfeeding, and techniques for positioning, facilitating an effective latch, and determining whether the baby is getting enough milk. What else should I be doing to prepare women for breastfeeding?

## COLUMNIST'S REPLY

Breastfeeding is an integral part of the childbirth education curriculum. Childbirth classes should include discussion of the benefits of breastfeeding for mother and baby, the hazards of not breastfeeding, and some “how-to” information. Many childbirth educators encourage women to attend a breastfeeding class and to talk with breastfeeding mothers. Surprisingly, though, childbirth educators do not always discuss the relationship between the birth itself and the early days of breastfeeding. We are just beginning to understand and appreciate how wom-

en's bodies prepare for breastfeeding during pregnancy, how what happens during labor and birth sets the stage for breastfeeding, and how the first minutes and hours after birth affect breastfeeding. The way the birth proceeds powerfully influences the first hours and days of breastfeeding. Normal, natural birth sets the stage for problem-free breastfeeding—what nature intended—while a complicated, intervention-intensive labor and birth set the stage for problems.

## *Nature's Perfect Breastfeeding Preparation*

From the start of pregnancy, the preparation for breastfeeding begins. The breasts enlarge, the areolas darken, and the nipples become more erect. By the fourth month, colostrum is produced. Milk production and milk let-down will wait for the hormone changes that come with labor, birth, and the delivery of the placenta. The process is so well planned that, if the baby is born prematurely, the milk the mother produces is higher in fat in order to meet the baby's

special nutritional needs. Nature perfectly prepares the mother's body for breastfeeding.

Nature also perfectly prepares the baby for breastfeeding. The baby is born competent and capable and ready to breastfeed. He instinctively roots and sucks. When placed skin-to-skin on his mother's chest, he instinctively crawls and self-attaches to her breast, in just the right way. He sees and smells, and these senses help guide him to the breast. When held in his mother's arms or placed skin-to-skin, he instinctively throws back his head and opens his mouth wide—the perfect positioning for an effective latch. Babies are born ready and eager to breastfeed.

### ***Hormonal Influences***

The hormonal orchestration of labor and birth sets the stage in a more immediate way for the process of breastfeeding for both the mother and her baby. During labor, surging levels of oxytocin are responsible for increasingly strong and effective contractions. With rising levels of oxytocin and the increasing pain that accompanies the strong contractions, endorphins are released. High levels of endorphins help women cope with painful contractions and contribute to their becoming more instinctive and entering into an almost dream-like state. As the baby moves down the birth canal, very close to the actual birth, catecholamines are released. The surge in catecholamines creates an energy boost for the mother. Additionally, the baby is born with high levels of catecholamines (Newton, 1987; Odent, 2003). The result is a bright, alert baby and an energized mother ready to greet him.

Right after birth, these same hormones continue to work their magic. When placed skin-to-skin on his mother, the baby's weight on her uterus, his hand and head movements, and then his sucking at the breast stimulate oxytocin release (Matthiesen, Ransjo-Arvidson, Nissen, & Uvnas-Moberg, 2001). Oxytocin facilitates the separation of the placenta and keeps the uterus contracted, preventing excessive bleeding. After birth, high levels of catecholamine in the baby insure he is alert. High levels of endorphins in the mother pass on to the baby in her breast milk. Endorphins help make the transition easier for the baby, facilitating relaxation and calm.

Prolactin and oxytocin are released in response to stimulation by the baby's sucking at the breast. Prolactin is responsible for milk production, and oxytocin for milk letdown. However, these hormones are beneficial in other ways. Prolactin is sometimes called "the love hormone." In animals,

Normal, natural birth sets the stage for problem-free

breastfeeding—what nature intended—while a complicated, intervention-intensive labor and birth set the stage for problems.

it is responsible for mothering behaviors. Oxytocin is responsible for the relaxed, sometimes sleepy, calm feelings that accompany milk letdown. Together, these two hormones keep mothers relaxed, calm, and ready to care for their babies (Uvnas-Moberg, 2003). In a very real sense, the birth of a baby is also the birth of a mother—the birth of a breastfeeding baby and mother.

### ***Interference from Routine Interventions***

Events surrounding the birth can sabotage nature's plan. Many of the birthing practices that are considered almost routine (induction, epidurals, separation of the mother and her baby) interfere in powerful ways with the hormonal orchestration of labor and birth and, ultimately, with breastfeeding. The best way to insure that both the mother and her baby are ready for birth is to allow labor to start on its own. A baby that is even a little early is more likely to have difficulty with breastfeeding. Pitocin, unlike naturally occurring oxytocin, does not cross the blood/brain barrier. As a result, the pituitary is not stimulated to release endorphins. Without the pain-relieving help of abundant endorphins, women who are induced with pitocin are more likely to require epidurals. Whenever an epidural is given and all pain is removed, naturally occurring oxytocin levels drop, requiring increasing amounts of pitocin (Lieberman & O'Donoghue, 2002). Without high levels of oxytocin and endorphins, a surge in catecholamines does not occur as the birth becomes imminent. The disruption of the hormonal orchestration of labor results in women giving birth with relatively low levels of naturally occurring oxytocin, endorphins, and catecholamines. Consequently, the outcome of low hormonal levels is a less responsive mother and baby (Odent, 2003).

The medication used in the epidural does, in fact, "get to the baby." We are just beginning to understand the neurobehavioral effects of this medication. It is not unusual for babies exposed to the epidural to have difficulty with latching on and an uncoordinated suck/swallow response for hours or days (Baumgarder, Muehl, Fischer, & Pribbenow, 2003; Ransjo-Arvidson et al., 2001). Another

Getting breastfeeding off to the best possible start means choosing normal birth and selecting caregivers and places of birth that promote, protect, and support normal birth.

unintended outcome of epidural analgesia is an increased risk of instrument birth (Lieberman O'Donoghue, 2002). The trauma to the baby can make it painful for him to assume the natural, instinctive positioning for breastfeeding and can contribute to a difficult latch. A significant wake-up call to all childbirth educators is the finding that from 26 to 41% of the women responding to the *Listening to Mothers* survey were unable to identify specific side effects of epidurals (Declercq, Sakala, Corry, Applebaum, & Risher, 2002).

Newborn care practices also affect breastfeeding. Vigorous suctioning can create oral aversion as the baby protects himself by keeping his mouth shut (Kroeger & Smith, 2004). Overstimulating the baby with multiple assessment examinations, suctioning, weighing and measuring, heel sticks for glucose checks, eye treatment, and injections can cause the baby to “shut down.” The result is a sleepy baby that is difficult, if not impossible, to nurse. Routinely separating babies from their mothers for evaluation and bathing during the minutes and hours after birth disrupts the baby's ability to find the breast and self-attach (Righard & Alade, 1990). Bathing possibly removes the smell of the amniotic fluid, a guide to finding the nipple. These birthing practices—induction, epidurals, instrument delivery, routine newborn care, and separation of the mother and her baby—create many of the problems we see in the early hours and days of breastfeeding.

### **Promoting Normal Birth**

The typical problems that plague early breastfeeding—difficult latch, sore nipples, sleepy baby, and engorgement—are rare when the mother has had a normal birth and has not been separated from her baby. Keeping the mother and her baby together, especially in the skin-to-skin position, goes a long way toward solving problems that may develop. When the baby stays with his mother, who responds quickly to early infant feeding cues, nursing her baby frequently around the clock, engorgement does not occur. Remaining in close, physical contact with his mother, the baby's tem-

perature, heart rate, and respirations are more stable. Additionally, the baby nurses more frequently and more effectively (Anderson, Moore, Hepworth, & Bergman, 2003). The result is a good milk supply and a thriving baby.

Getting breastfeeding off to the best possible start means choosing normal birth and selecting caregivers and places of birth that promote, protect, and support normal birth. Introduce women in your classes to the six care practices that promote, protect, and support normal birth (Lamaze International, 2003, 2004). Encourage them to:

1. let labor start on its own,
2. move freely and find comfort in a variety of ways during labor,
3. plan for excellent labor support,
4. avoid routine interventions,
5. give birth in nonsupine positions, and
6. hold their babies in the skin-to-skin position immediately after birth and remain with them in the first hours and days after birth.

Some labors and births require medical intervention. Encourage the women in your classes to keep birth as normal as possible if complications arise and medical interventions are needed. If labor is complicated (e.g., when labor is induced for medical reasons, an epidural is required, or the birth of the baby requires the use of instruments), it becomes even more important for the baby to be held in the skin-to-skin position after birth. If birth has been difficult for the baby, advise the women in your classes to expect the early days of breastfeeding to be challenging for them and their baby. Healthy doses of both patience and confidence will be needed.

The U.S. Department of Health and Human Services and The Advertising Council's (2003) media campaign to increase breastfeeding adopted the slogan, “Babies were born to be breastfed.” We might add, “Mothers are ‘born’ to breastfeed.” Perhaps the most important way for childbirth educators to promote, protect, and support breastfeeding is to continue their commitment to promoting, protecting, and supporting normal birth. Help the women in your classes to know that a normal birth gets breastfeeding off to the best possible start.

### **RECOMMENDED READING**

To learn more about the relationship between birth and breastfeeding, read *Impact of Birthing Practices on Breastfeeding: Protecting the Mother and Baby*

*Continuum*, by Mary Kroeger and Linda J. Smith (Jones and Bartlett, 2004). This book is available at the Lamaze International Bookstore and Media Center (call toll free at 877-952-6293 or order online at [www.lamaze.org](http://www.lamaze.org)).

## REFERENCES

- Anderson, G., Moore, E., Hepworth, J., & Bergman, N. (2003). Early skin-to-skin contact for mothers and their healthy newborn infants (Cochrane Review). In *The Cochrane Library*, 3. Oxford: John Wiley.
- Baumgardner, D. J., Muehl, P., Fischer, M., & Pribbenow, B. (2003). Effect of labor epidural anesthesia on breastfeeding on healthy full-term newborns delivered vaginally. *Journal of the American Board of Family Practitioners*, 16(1), 7–13.
- Declercq, E. R., Sakala, C., Corry, M. P., Applebaum, S., & Risher, P. (2002). *Listening to mothers: The first national U.S. survey of women's childbearing experiences*. New York: Maternity Center Association. Also, retrieved December 13, 2004, from [www.maternitywise.org/listeningtomothers](http://www.maternitywise.org/listeningtomothers)
- Kroeger, M., & Smith, L. J. (2004). *Impact of birthing practices on breastfeeding: Protecting the mother and baby continuum*. Sudbury, MA: Jones and Bartlett Publishers.
- Lamaze International. (2003). *Promoting, protecting, and supporting normal birth: Six care practices*. Washington, DC: Author. Also, retrieved December 13, 2004, from [www.lamaze.org/about/policy.asp](http://www.lamaze.org/about/policy.asp) and <http://normalbirth.lamaze.org/institute/default.asp>
- Lamaze International. (2004). Six care practices that promote, protect, and support normal birth [entire issue]. *Journal of Perinatal Education*, 13(2).
- Lieberman, E., & O'Donoghue, C. (2003). Unintended effects of epidural analgesia during labor: A systematic review. *American Journal of Obstetrics and Gynecology*, 186(5), s31–68.
- Matthiesen, A. S., Ransjo-Arvidson, A. B., Nissen, E., & Uvnas-Moberg, K. (2001). Postpartum maternal oxytocin release by newborns: Effects of infant hand massage and sucking. *Birth*, 28(1), 13–19.
- Newton, N. (1987). The fetus ejection reflex revisited. *Birth*, 14(2), 106–108.
- Odent, M. (2003). *Birth and breastfeeding: Rediscovering the needs of women during pregnancy and childbirth*. East Sussex, England: Clairview Books.
- Ransjo-Arvidson, A. B., Matthiesen, S., Lilja, G., Nissen, E., Widstrom, A. M., & Uvnas-Moberg, K. (2001). Maternal analgesia during labor disturbs newborn behavior. Effects on breastfeeding, temperature, and crying. *Birth*, 28(1), 5–12.
- Righard, L., & Alade, M. (1990). Effect of delivery room routines on success of first breastfeed. *Lancet*, 336, 1105–1107.
- U.S. Department of Health and Human Services & The Advertising Council. (2003). Breastfeeding awareness. Retrieved December 13, 2004, from <http://www.adcouncil.org/campaigns/breastfeeding/>
- Uvnas-Moberg, K. (2003). *The oxytocin factor: Tapping the hormone of calm, love and healing*. Cambridge, MA: Da Capo Press.

---

JUDITH LOTHIAN is a childbirth educator in Brooklyn, New York, and a member of Lamaze International Board of Directors. She is also an associate professor in the College of Nursing at Seton Hall University in South Orange, New Jersey.